## Place Holder for Cover Slide



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The following is a set of MS PowerPoint slides that contains information and data that addresses Frequently Asked Questions (FAQs) about the NOAA Environmental Compliance and Safety Assessment System (NECSAS). This information has been compiled through the efforts of various corporate teams working specifically on the NECSAS Program. Having participated in these efforts, I have attempted to chronicle our efforts, revising and adding information to reflect the latest labors of the Team.

Since these slides provide a fairly comprehensive overview of the NECSAS Program, feel free to utilize them as convenient tools to:

- 1) build briefings for any level
- 2) respond to data calls
- 3) reemphasize areas of the Program
- 4) provide process and procedural training

Hopefully, I have accurately captured and depicted our efforts. By no means is the set complete; it is a work-in-progress that will continue to evolve through our efforts. I would appreciate any ongoing comments or recommendations to enhance this set for our collective use. These slides will remain posted here on the ECSD website subject to updating. ESD/O2MayO2



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### **Program Goals**

To provide quality compliance assistance service by:

- Attaining, sustaining and monitoring compliance with applicable Federal, state, and local environmental, safety and health laws, regulations and standards.
- Progressing beyond compliance through the strategic implementation of innovative policies and documented best management practices, procedures, and projects to mitigate potential liabilities.
- Assessing and enhancing the safety and environmental management systems of the organization.



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### **Program Objectives**

- Assist <u>Line Offices</u> in identifying and resolving environmental compliance and safety and health issues;
- Assist <u>Line Offices</u> in developing corrective strategies to address the issues;
- Identify to <u>Line Offices</u> the resources necessary to implement resolution;
- Provide accurate, technical data to the <u>Line Offices</u> to support the programming effort; and
- Track the execution of corrective strategies for <u>Line Office</u> use.



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#### **Environmental Mandates**

- Executive Order 13148, Greening the Government through Leadership in Environmental Management (21Apr00)
- NAO 216.17 NOAA Environmental Compliance Program (29Sep98)
  - Declaration of NOAA's Designated Responsible Officials under NAO 216.17 and EO 12196 (4Oct00)
- NOAA Environmental Compliance Policy 97- 01
   NOAA Environmental Audit Policy, 30Sep97 (rev 30Sep98)
- EPA's Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, Final Policy Statement, Federal Register, Volume 60, No. 246 (22Dec95)



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### **Health and Safety Mandates**

- Executive Order 12196, Occupational Safety and Health Programs for Federal Employees (26Feb80)
  - Declaration of NOAA's Designated Responsible Officials under NAO 216.17 and EO 12196 (4Oct00)
- Title 29, Code of Federal Regulations, Part 1960, Basic Program Elements for Federal Employees Occupational Safety and Health Programs and Related Matters
- Department of Commerce, Occupational Safety and Health Manual (Jul 97)



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### **Assessment at Multiple Levels**

- to Federal requirements
   [as catalogued in The Environmental Assessment and Management (aka TEAM) Guide and associated
  - supplements for Occupational Safety and Health and incorporated into the NECSAS software]
- to State, County and Local requirements (only superseding)
   (as researched, documented, and briefed among assessment team members; Contractor incorporates these into the NECSAS software prior to on-site visits)



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#### **Media-Based Protocols**

(Environmental)

- Air Emissions
- Cultural Resources
- Hazardous Materials
- Hazardous Waste
- Natural Resources
- Pesticides
- POL Management
- Solid Waste Management
- Storage Tanks

- Storage Tanks
- Toxic Substances
  - PCBs
  - Asbestos
  - Radon
  - Lead-base Paint
- Wastewater
- Water Quality
- Other Issues
  - Project Impacts
  - Noise "



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### **Media-Based Protocols**

(Safety and Health)

- Basic Program Elements
- Exposure/Medical Records
- Illness/Injury Reporting
- Hazardous Communication
- Personal Protective Equipment
- Occupational Noise Exposure
- Accident Prevention Signs/Tags
- Machinery/Machine Guarding
- Welding, Cutting, and Brazing

- Air Contaminants
- Benzene
- Methylene Chloride
- Ventilation
- Dip Tanks
- Cadmium
- Asbestos/Lead
   (also in construction)
- Sanitation



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### **Media-Based Protocols**

(Safety and Health)(cont'd)

- Safety-Related Work Practices
- Walking/Working Surfaces
- Materials Handling/Storage
- Hazardous Materials
- Permit-Required Confined Space
- Ionizing Radiation
- Non-ionizing Radiation
- Bloodborne Pathogens
- General Construction Issues

- Means of Egress
- Fire Protection
- Emergency Response
- Lockout/Tag-out
- Ergonomics
- Spray Finishing
- Hand/Portable Power Tools and Other Hand-held Equip't



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#### **NECSAS** Zones for Tier I Assessments

la New England – no Maine (ME), New Hampshire (NH), Vermont (VT)

Ib New England – so Connecticut (CT), Rhode Island (RI), Massachusetts (MA)

2 Mid-Atlantic Delaware (DE), New Jersey (NJ), New York (NY), Pennsylvania (PA)

Capital District of Columbia (DC), Maryland (MD), Virginia (VA)

4 Southeast Alabama (AL), Florida (FL), Georgia (GA)

5 Corn Belt Illinois (IL), Indiana (IN), Ohio (OH)

6 Gulf Louisiana (LA), Mississippi (MS), Texas (TX)

7 Prairie Missouri (MO), Oklahoma (OK)

8 Pacific California (CA)

9 Northwest Oregon (OR), Washington (WA)

10 Alaskan Alaska (AK)

11 Micronesia Hawaii (HI)(other Pacific locations should be considered/included)

Please note that all 50 states where NOAA facilities/sites are located are not included in zones (i.e., only 29 states are zoned). However, any of the 21 zone-excluded states can be added to the Schedule during any Annual NECSAS Planning Meeting based on the Line Office(s) priorities.



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### **Perpetual Calendar**

FY 00/04/08	FY 01/05/09	FY 02/06/10	FY 03/07/11	
(I/V/IX)	(II/VI/X)	(III/VII/XI)	(IV/VIII/XII)	
DC/MD/VA <sup>3</sup>	CA <sup>8</sup>	AL/FL/GA <sup>4</sup>	AK <sup>10</sup>	
IL/IN/OH <sup>5</sup>	CT/MA/RI <sup>1b</sup>	LA/MS/TX <sup>6</sup>	CO	
MI	GU <sup>11</sup>	SC	DE/NJ/PA <sup>2</sup>	
NC	HI <sup>11</sup>		MO/OK <sup>7</sup>	
OR/WA <sup>9</sup>	ME/NH/VT <sup>1a</sup>			

Note: listing of zones and states and site within fiscal years is alphabetical only; the distribution was based on stakeholder interests, e.g., limited, fiscal resources, a balanced, annual work load among the Line Offices, etc.



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### **Design of the Perpetual Calendar**

### The NECSAS Perpetual Calendar is based on:

- 1) a four-year cycle where
  - a) column headings (black) indicate fiscal year(s) when Tier I compliance assistance service (baseline assessments) will be conducted, e.g., FY 00/04/08... designates FY 2000, 2004, 2008, etc.
  - b) column headings (red) indicate ordinal year(s) when the ECSD-managed Tier I compliance assistance service is planned, i.e., III/VII/XI designates the third, seventh, and eleventh years beginning with the Program's inaugural year (i.e., FY00or year I); and



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### Design of the Perpetual Calendar (cont')

- 2) currently, eleven (11) zones of concentrated Line Office facilities/sites/activities have been mapped and identified which are
  - a) intended to include the major clusters of highrisk facilities/sites/activities for cost-effective execution of the Program; and
  - b) comprised of one state, a group of states, or a region that can be managed in a coordinated, single assessment team effort considering the geography, travel distances, and logistics.



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### **Assessment Scheduling**

The NECSAS assessment scheduling process at the Annual Planning Meeting allows for:

- 1) continuous scheduling and programming as
  - a) assessments within the executable and out years of the budget cycle can be set very early;
  - b) the order and periods for zonal assessment(s) of facilities/sites/activities is set indefinitely for program years; and
- 2) flexibility and customization to customers' needs as



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### **Assessment Scheduling** (cont'd)

- a) any facilities/sites/activities within a zone(s) can be selected for/omitted from being assessed through an on-site Tier I visit during any given cycle-year based on priorities, budget, etc.;
- b) intra-zonal facilities/sites/activities that are omitted from the Tier I list for on-site assessment can be still evaluated concurrently by alternate methods (e.g., Tier III effort of telephone surveys; and
- c) outlying states/facilities/sites/activities not listed in a zone in the perpetual calendar can be added, scheduled and ultimately assessed that year based on the approval of the ECSC Council (e.g., sites in Idaho).



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### **Assessment Scheduling** (cont'd)

### The NECSAS assessment scheduling promotes:

- 3) cost-effective program execution through
  - a) Line Office partnering and team coordination
  - b) shared preparatory and travel costs; and
  - c) strategic analysis of regional and inter-Line Office trends and issues.



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## **Levels of Compliance Assistance Service**

**Tier I:** the most comprehensive and complex level of compliance assistance service provided within the NECSAS Program; Tier I (Assessments) efforts are formal, multi-media, EH&S audits managed by a disinterested, third party - primarily a contracted consultant - and follow a systematic approach defined by business rules (i.e., for pre-assessment, site assessment and post assessment activities), policy, and program standards. Standard data elements, formatted in a finding management report, are interactively verified and validated by staff from NOAA and its assessed facilities/sites/activities, the Line Offices, the Administrative Service Centers, and the Contractor over a thirty to sixty day review period. The Contractor (or assessment team) is required to submit three developmental stages of the data (contractual deliverables in the form of compilations of draft, proof and final data sets); each data set is subject to a fourteen-day review by NOAA and its appropriate stakeholders. The final data set, once reviewed and completed, provides corrective action planning which can then be incorporated as part of the project prospectus and strategic plan. The scheduling of Tier I Assessments is conducted during the Annual NECSAS Planning Meeting, six months prior to the beginning of the target year, according to a preapproved, four-year perpetual calendar. Other terms often used to describe Tier I compliance assistance include assessments, external or bench mark visits, or third-party audits.



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### Compliance Assistance Service: Tier II

A joint effort of facility compliance assistance service conducted by the Regional Environmental Compliance Officer (RECO) and Safety Manager (RSM); the duo representing the responsible Administrative Service Center. By rule, both RECO and RSM must actively participate during the on-site activities and follow-up reporting that is required of a Tier II (Visits) effort. The Tier II approach will follow a formal, multi-media approach, similar to a Tier I Assessment - defined by its own discrete business rules, policy, and standards - but to a pared down version that is established by the Corporate Assessment Team. Tier II Visits may be performed for a variety of reasons (e.g., follow-up to Tier I efforts, technical assistance at the request of the facility or site, etc.), based on the discretion of the participating RECO-RSM team, with each visit being documented with the aforementioned report on a timely basis. The Corporate Assessment Team will establish the format for standard Tier II reports, incorporating data elements common to Tier I data sets, to facilitate Program metrics including the measurability of Tier II compliance assistance service. Other terms often used to describe Tier II compliance assistance include in-house assistance visits or internal audits.



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### **Compliance Assistance Service: Tier III**

All other forms of compliance assistance service provided to NOAA facilities by internal staff or agents such as one-person visits, telephone surveys, completion of site questionnaires, online enquiries, etc. The approach to Tier III (Other) efforts will be the simplest and least formal of the three tiers, however, each will be defined by its own discrete business rules, policy, and standards (as appropriate) under the auspices of the NECSAS Program to facilitate measurability of this form of compliance assistance service.



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### The Process\*

Complete & Submit Facility Data Sheets and Pre-Visit Questionnaires	Step 1
• Conduct Site Assessment Activities	Step 2
Verify Collected Field Data	
<ul> <li>Prepare &amp; Deliver Preliminary Dataset (PrDS) (A/E)</li> </ul>	
Initiate Viable Corrective Actions	Step 3
Prepare & Deliver Draft Dataset (DDS)	Step 4
Screen Corrective Action Alternative Strategies and Validate & Submit DDS	Step 5
Prepare & Deliver Proof Dataset (PfDS)	Step 6
Review PfDS and Submit Validated PfDS	Step 7
Prepare & Deliver Final Dataset	Step 8
Document & Submit Projects for Budget/Programming	Step 9

<sup>\*</sup> Note: entire, interactive process takes approximately 3 months; • identifies action to be taken by assessed entity; • identifies action to be taken by assessment team (Contractor); • identifies joint action to be taken.



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#### **Process Milestones**

•	Assessment team kick-off/orientation meeting	Day 1
•	On-site data collection, interviews, walk-through (5-10 days)	Day 1 – 5/10
•	Initial quality assurance review of all data (each day on-site)	Day 1 - 5/10
•	Delivery of preliminary dataset to Line Office/NOAA (end of visit)	Day 5/10
•	Departure of assessment team (end of visit)	Day 5/10
•	Preparation of draft report (dataset format)(14 days)	
•	Delivery of draft report	<b>Day 24</b>
•	Complete review of draft report by Line Office/NOAA (14 days)	Day 38
•	Delivery of proof report (dataset format)	<b>Day 52</b>
•	Complete review of proof report by Line Office/NOAA (10 days)	Day 62
•	Delivery of final report (aka LOCAP*)(10 days)	<b>Day 72</b>

o identifies milestones for the assessed entity; o identifies milestones for the assessment team (Contractor)

<sup>\*</sup> the Line Office Corrective Action Plan is the original finding sheet expanded with information through interactive review by the Line Office and A/E. It contains a summary of assessment data (i.e., facility, observation, and requirement), corrective action strategy and status, and a projected closure date for each finding.



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**FY 02** 

## **Completed Tier I Assessments**

**FY 01** 

**FY 00** 

1 <sup>st</sup> Qtr	Oct			CA	Oct
	Nov	NC			Nov
	Dec				Dec
2 <sup>nd</sup> Qtr	Jan		GU		Jan
	Feb				Feb
	Mar				Mar
3 <sup>rd</sup> Qtr	Apr				<b>A</b> pr
	May		HI		May
	Jun				Jun
4th Qtr	Jul			FL/LA/TX	Jul
	Aug	OR			Aug
	Sep	MD/VA			Sep



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### Risk Classification for Safety and Health Findings

CLASS I: SERIOUS SAFETY/HEALTH (S/H) FINDING - A Class I, serious S/H finding is defined as one in which there is <u>substantial probability that death or serious</u> <u>physical harm could result</u>, and management knew or should have known of the hazard. [Serious S/H findings will be categorized in terms of Risk Assessment Code (RAC) of RAC 1 or RAC 2.]

CLASS II: OTHER-THAN-SERIOUS S/H FINDING - A Class II, other-than-serious finding is defined as one that has a <u>lower probability of resulting in an injury or illness</u>. [Other-Than-Serious S/H findings will be categorized in terms of RAC 3, RAC 4 or RAC 5.]

CLASS III: REGULATORY OR REPEAT S/H FINDING - A Class III, Regulatory or Repeat S/H finding involves one or more of the following examples:

- no formal posting of injury and illness reporting and/or record-keeping requirements;
- no formal written standard operating procedures for hazardous operations; no formal program documentation (e.g., fire evacuation plans, permitted confined space entry, etc.).

A repeat repeat violation is a violation of any standard, regulation, rule or order where, upon reassessment/reinspection, a substantially similar finding is found.



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#### **Basis for Classification**

### **New OSHA Civil Penalties Policy (01/01/1992):**

- SERIOUS
- OTHER-THAN-SERIOUS VIOLATIONS
- REGULATORY VIOLATIONS
- WILLFUL VIOLATIONS
- REPEAT VIOLATIONS
- FAILURE TO ABATE



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### **Basis for Classification (continued)**

New OSHA Civil Penalties Policy, 01/01/1992: (continued)

### **SERIOUS VIOLATIONS:**

A serious violation is defined as one in which there is substantial probability that death or serious physical harm could result, and the employer knew or should have known of the hazard.

Serious violations will be categorized in terms of severity -- high, medium or low -- and the probability of an injury or illness occurring -- greater or lesser.



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### **Basis for Classification (continued)**

New OSHA Civil Penalties Policy, 01/01/1992: (continued)

## SERIOUS VIOLATIONS. Base penalties for serious violations will be assessed as follows:

<u>Severity</u>	<b>Probability</b>	<u>Penalty</u>	
High	Greater	\$5,000	
Medium	Greater	\$3,500	
Low	Greater	\$2,500	
High	Lesser	\$2,500	
Medium	Lesser	\$2,000	
Low	Lesser	\$1,500	



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### **Basis for Classification (continued)**

New OSHA Civil Penalties Policy, 01/01/1992: (continued)

#### **OTHER-THAN-SERIOUS VIOLATIONS:**

If an employer is cited for an other-than-serious violation which has a low probability of resulting in an injury or illness, there will be no proposed penalty. However, the violation must still be corrected. If the other-than-serious violation has a greater probability of resulting in an injury or illness, then a base penalty of \$1,000 will be used, to which appropriate adjustment factors will be applied beyond the initial 30 days.



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### **Basis for Classification (continued)**

New OSHA Civil Penalties Policy, 01/01/1992: (continued)

#### **REGULATORY VIOLATIONS:**

Regulatory violations involve violations of posting, injury and illness reporting and record keeping requirements, and not telling employees about advance notice of an inspection. OSHA will be applying adjustments only for the size and history of the establishments.



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## **Terminology**

Risk - Chance of hazard or bad consequences; exposure to chance of injury or loss. Risk level is expressed in terms of hazard probability and severity.

Probability - The likelihood that an event will occur.

Exposure - The frequency and length of time subjected to a hazard.

Severity - The expected consequence of an event in terms of degree of injury, property damage, or other mission impairing factors, and/or environmental degradation that should occur.



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### **Hazard Severity**

Category: I Description: Catastrophic

Definition: Death or permanent total disability, system loss, major

property damage (> \$500,000), and/or major environmental degradation.

Category: II Description: Critical

Definition: Permanent partial disability or temporary total disability in excess of 3 months, major system damage, significant property damage (> \$100,000), and/or significant environmental degradation.

Category: III Description: Marginal

Definition: Minor injury, lost workday accident, or compensable injury or illness, minor system damage, minor property damage (>\$10,000), and/or minor environmental damage.

Category: IV Description: Negligible

Definition: First aid or minor supportive medical treatment, minor system

impairment, and/or minor environmental incident.



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### **Accident Probability**

Description: Frequent Level: A

Individual item or activity: Likely to occur frequently in life of system, item, facility, or operation, etc. Fleet or inventory: Continuously experienced.

Description: Probable Level: B

Individual item or activity: Will occur several times in life of system, item,

facility or operation, etc. Fleet or inventory: Will occur frequently.

Description: Occasional Level: C

Individual item: Likely to occur sometime in life of system, item, facility or

operation, etc. Fleet or inventory: Will occur several times.

Description: Remote Level: D

Individual item: Unlikely but possible to occur in life of system, item,

facility or operation, etc. Fleet or inventory: Unlikely, but can reasonably

be expected to occur.

Description: Improbable Level: E

Individual item: So unlikely it can be assumed occurrence may not be

experienced. Fleet or inventory: Unlikely to occur, but possible.



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### Risk Assessment Code (RAC)

RAC (1) Imminent Danger: catastrophic requiring immediate attention (Operations, activities must be discontinued).

RAC (2) Dangerous: potentially catastrophic requiring planned abatement (Operations, activities should be discontinued, or with limited and/or strict controls).

RAC (3) Serious: major life safety, facility and system loss, requiring planned abatement (Operations continued with controls).

RAC (4) Non-serious: minor life safety, system or facility damage and RAC (5) (Operation continued with risk acceptance by Supervisor or Operator).



**Hazard** 

Severity

# NOAA Environmental Compliance & Safety Assessment System

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### **Risk Assessment Code Matrix**

## **Accident Probability**

	A	В	C	D	E
I	1A 1	IB 1	IC 2	ID 3	IE 4
II	IIA 1	ив 2	IIC 3	IID 4	IIE 5
III	IIIA 2	IIIB 3	IIIC 4	IIID 5	IIIE 5
IV	IVA 3	IVB 4	IVC 5	IVD 5	IVE 5



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### **Decision Authority Matrix**

Hazard RAC: IA( 1 ), IB( 1 ), IIA( 1 )

**Decision Authority: Risk acceptance by NOAA Administrator** 

Hazard RAC: IC(2), IIB(2), IIIA(2)

Decision authority: Risk acceptance by NOAA Facilities Director

and Environmental Compliance and Safety Division

Hazard RAC: ID(3), IIC(3), IIIB(3), IVA(3)

Decision authority: Risk acceptance by Local Manager, or

Supervisor having direct control

Hazard RAC: IID( 4 ), IIIC( 4 ), IVB( 4 ), and RAC ( 5 )

Decision authority: Risk acceptance by Supervisor or Operator



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### Risk Management Process and Matrix



Risk Management





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NECSAS assessment conducted on site.
Safety and/or health deficiency observed,
followed by verification as non-compliant with
an OSHA standard or other relevant requirement.
Q&A conducted by the NECSAS team, draft
report sent to ECSD for final Q&A.

### **RAC Management and Data Flow**

NOAA Safety Manager analyze the assigned RAC's along with the LO/LECO and other concerned parties. Consensus is reached on the assigned RAC, submitted to field.

Local Designated Responsible Person with assistance from the LO, RSM and/or RECO formulates abatement plans, and management strategies utilizing the RAC decision hierarchy.